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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/651,260	08/30/2000	Jong Sang Back	8733.A285	1251

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LONG ALDRIDGE & NORMAN, LLP
701 PENNSYLVANIA AVENUE N.W.
SUITE 600
WASHINGTON, DC 20004

EXAMINER

NGUYEN, KIMNHUNG T

ART UNIT PAPER NUMBER

2674

DATE MAILED: 04/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/651,260

Applicant(s)

BAEK, JONG SANG

Examiner

Kimnhung Nguyen

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☒ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

2. Claims 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Yamaguchi (US patent 6,329,975).

Yamaguchi discloses in figure 3 that a liquid crystal display device with a multi-timing controller comprising a liquid crystal display panel having a display standard corresponding to an arranged pixel; an interface receiving a data inputting from the exterior thereof and a control signal to the display standard; a timing controller (Hsync, Vsync) for latching and outputting a data inputted from the interface, and for generating and outputting timing signals for driving the LCD panel; and a driving circuit (2, 3) for receiving the timing signals from the timing controller; the timing controller includes a display standard, a selector (8,9) having each timing generation information according the plurality of timing standards, a timing generator (6) for receiving the timing signals from the control signal (see abstract, see figure 3).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi (US patent 6,329,975) in view of hang et al. (US patent 5,859,635).

Yamaguchi discloses in figure 3 that a liquid crystal display device with a multi-timing controller comprising a liquid crystal display panel having a display standard corresponding to an arranged pixel; an interface receiving a data inputting from the exterior thereof and a control signal to the display standard; a timing controller (Hsync, Vsync) for latching and outputting a data inputted from the interface, and for generating and outputting timing signals for driving the LCD panel; and a driving circuit (2, 3) for receiving the timing signals from the timing controller; the timing controller includes a display standard, a selector (8,9) having each timing generation information according the plurality of timing standards, a timing generator (6) for receiving the timing signals from the control signal (see abstract, see figure 3). However, he does not disclose wherein the display set of VGA, and the selector consists of a memory for storing timing information, and a multiplexor for selecting any one of the timing information. Hang et al. disclose in figures 1-3 that the display set of VGA (see column 4, lines 64-66) and the selector (320) consists of a memory (120, figure 1) for storing a timing information, and a multiplexor (330, 331) for selecting any one of the timing information (see column 4, lines 64-66). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the display set of VGA, selector consists a memory and a multiplexor for select the timing information of Hang et al. to the display system as taught by Yamaguchi because this would generate synchronizing sync signals to VGA and receive a plurality of signals including a horizontal and a vertical signals.

Allowable Subject Matter

5. Claims 4-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

None of the cited art teaches or suggests that liquid crystal display device with a multi-timing controller comprising a liquid crystal display panel having a display standard corresponding to an arranged pixel, wherein the timing generator includes a first controller for generating the timing signal corresponding to the timing information selected from the selector, a second, a third, a fourth, and a fifth controller for always equally keeping the polarity of the horizontal/vertical synchronizing signal.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number (703) 308-0425.

If attempts to reach the examiner by telephone are unsuccessfully, the examiner's supervisor, **RICHARD A HJERPE** can be reached on **(703) 305-4709**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D. C. 20231

Or faxed to:

Application/Control Number: 09/651,260
Art Unit: 2674

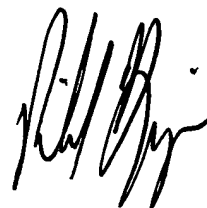
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(703) 872-9314 (for Technology Center 2600 only).

Hand-delivery response should be brought to: Crystal Park II, 2121 Crystal Drive,
Arlington, VA Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the Technology Center 2600 Customer Service Office whose telephone
number is (703) 306-0377.

Kimnhung Nguyen
April 1, 2002



**RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600**